

Program Description/Textbook or Print Instructional Material

Vendor: Delmar Learning Web Address: www.delmar.com

Title: Introduction to Electronics

Author: Gates Copyright: 2001

ISBN: 0-7668-1698-2 Course/Content Area: Vocational and Career Education; Industrial Technology; Electronics Technology

Intended Grade or Level: 9-12 Readability Level: 11.0 (Flesch Kincaid)

List Price: 80.95 Lowest Wholesale Price: 60.00

All materials bid as of July 1, 2003 must be offered in an alternative format for students who require reading accommodations. A description of the levels of accommodation is included on p. 8-9 of this bid packet. The Kentucky Department of Education must receive a copy of the alternative format if the material is placed on the State Multiple List.

Level of Accommodations (Level One, Two or Three) Level Three

If Level Two or Three, please provide rationale for not meeting Level One Compliance It is not financially feasible for our products to meet Level One at this time.

FEATURES

DISCLAIMER: The features of each book or program were developed by the publisher and do not reflect the opinion of the State Review Team, State Textbook Commission, nor of the Kentucky Department of Education.

Content

- All-new introduction to surface mount components, a topic often omitted in other introductory electronics books yet frequently required in basic industry and home workshop settings.
- Electronics Workbench® problems and examples to provide readers with hands-on opportunities to apply DC/AC principles and develop critical thinking skills by building, analyzing and troubleshooting circuits.
- Reduction of lengthy cross multiplications in examples simplifies the mathematics and serves to further clarify when and how to use basic formulas.

Student Experiences

- Introduction to Electronics is the ideal choice for readers with no prior electronics experience who seek a basic background in DC and AC circuits that aligns closely with today's business and industry requirements.
- Chapter-end review questions and summaries ensure mastery, while careers are profiled throughout Introduction to Electronics, 4th Edition to stimulate the reader's interest in further study and/or potential employment in electronics or related fields.

Assessment

Now in its fourth edition, Introduction to Electronics continues to offer its readers a complete introduction to basic electricity/electronics principles with emphasis on hands-on application of theory. Expanded discussion of Capacitive AC, Inductive AC, and Resonance Circuits is just the beginning! In addition, this electron flow, algebra-based electricity/electronics primer now includes coverage of topics such as surface mount components, Karnaugh maps, and micro controllers that are becoming increasingly important in today's world. In addition, all-new photographs are used throughout the book and detailed, step-by-step examples are included to show how math and formulas are used.

Organization

- For the first time, MultiSIM® problems have been integrated into Introduction to Electronics, providing even greater opportunities to apply basic electronics principles and develop critical thinking skills by building, analyzing, and troubleshooting DC and AC circuits.
- Objectives are clearly stated at the beginning of each brief, yet highly focused chapter to focus attention on key points.
- Expanded coverage of Capacitive AC, Inductive AC and Resonance Circuits provides readers with a more complete introduction to electronics than ever before!

Resource Materials

Gratis Items To Be Provided And Under What Conditions

Instructor's Manual (0-7668-1699-0) Free 1 per teacher

Available Ancillary Materials

RESEARCH DATA AND EVIDENCE OF EFFECTIVENESS

DISCLAIMER: The research data and evidence of effectiveness was provided by the publisher and does not reflect the opinion of the State Review Team, State Textbook Commission, nor the Kentucky Department of Education.

NOTE: Please complete this section by indicating the research data and evidence of effectiveness or give a web site where the information is located. If there is no research data and evidence of effectiveness, please indicate **“not available”** in the space.



Group V - Career/Technical Vocational/Practical Living Education Instructional Materials Evaluation Tool Manufacturing Career Cluster



Title: Introduction to Electronics/CD Rom/Instructors Guide \$60.00			
Publisher: Delmar Learning			
Item Evaluated: Text/CD Room/ Instructors Guide			
Copyright Date: 2004		Evaluator: Tomlinson/Wilson	
Content Level: 9-12		Date of Evaluation 7/29/03	
Level of Alternative Format	Level 1 – Full Compliance	Level 2 – Provisional Compliance	Level 3 – Marginal Compliance
This section completed by Exceptional Children Services			

Overall Strengths and/or Weaknesses

Disclaimer: Comments on the strengths and/or weaknesses of each book, material or program were written by members of the State Textbook/Instructional Materials Review Team and reflect their opinions . They do not reflect the opinions of the State Textbook Commission nor the Kentucky Department of Education. In addition, the State Textbook/ Instructional Materials Review Team completed each evaluation form during the week of July 28-Aug. 1, 2003. In order to maintain the integrity of the of the review team's comments, editing was limited to spelling and punctuation.

Recommendations:	
<input checked="" type="checkbox"/> Recommended by reviewers to State Textbook Commission	
<input type="checkbox"/> Not recommended by reviewers to State Textbook Commission	

Publisher's Explanation of Reviewer's Comments: By action of the State Textbook Commission, publishers are provided limited space, 150 words, to respond to what they may consider factual errors made by the reviewers in the evaluation.



Group V - Career/Technical Vocational/Practical Living Education Instructional Materials Evaluation Tool Manufacturing Career Cluster



Title: Introduction To Electronics/CD Rom/ Instructors Guide		Publisher Delmar Learning
Technology Management Summary Data:	20 possible points	_____7_____ points earned
Technology Management Comments:		
Technology Presentation/Interface Summary Data:	36 possible points	____16_____ points earned
Technology Presentation/Interface Comments:		
Content Summary Data:	140 possible points	____30_____ points earned
Content Comments:		
Instruction & Management Summary Data	52 possible points	____41_____ points earned
Instruction & Management Comments:		
Organization & Structure Summary Data	36 possible points	____31_____ points earned
Organization & Structure Comments:		
Resource Material Summary Data	40 possible points	____39_____ points earned
Resource Material Comments:		



Group V - Career /Technical & Vocational/Practical Living

Electronic Instructional Media Review Form

Stand Alone/Independent or Integrated Software for Manufacturing Career Cluster



Equipment (circle or change fill color)
Windows
Macintosh
CD-ROM
DVD
Sound
Other

If other, explain

Grade Level (circle or change fill color)
Primary
Intermediate
Middle
High

Audience (circle or change fill color)
Individual
Small Group
Large Group

Format (circle or change fill color)
Stand Alone/Independent
Integrated
Supplemental
In lieu of basal text

Cost _____	
_____ single copy	_____ site license
_____ network version	_____ school version
_____ lab pack of ____ copies	_____ online

Type of Software: Check all that apply	_____ Simulation	_____ Management	_____ Interdisciplinary	_____ Problem Solving	_____ Tutorial
_____ Exploratory	_____ Creativity	_____ Drill and Practice	_____ Critical Thinking	_____ Utility	_____ x_Other:

Rating Scale:	3—Some of the time	1—None of the time
4—All or the time	2—Minimally	0— Not applicable

Management	Rating
Allows customizing for individual learning needs.	1
Allows students to exit and resume at a later time.	1
Keeps a students performance record, where needed.	1
Allows control of various aspects of the software (e.g., turning sound off).	1
Allows for printed reports.	1
Comments:	Total 5

Presentation/Interface	Rating
Presents material in an organized manner.	2
Has consistent, easy-to-use, on-screen instructions.	2
Has developmentally correct presentation format.	1
Adapts to different learning environments (learning styles/multiple intelligences, etc.)	1
Accessible for special needs students.	1
Runs smoothly, without long delays.	2
Presents easy-to-view text and graphics.	2
Presents easy-to-hear and understand sounds.	2
Avoids unnecessary screens, sounds, and graphics.	2
Provides immediate, appropriate feedback.	1
Comments:	Total 16

Content— Manufacturing Career Cluster	Rating
Electrical/Electronic Safety	4
Direct Current Circuits/Lab	3
Alternating Current/Lab	3
Electrical Principals	3
Electronic Devices and Circuits	3
Electronic Drafting	0
Microcomputer Operating Systems	2
Fundamentals of Machine Tools	0
Applied Machining	0
Manual Programming CAD/CAM/CNC	0
Blueprint Reading	0
Computer Fundamentals	0
Fluid Power/Lab	0
Industrial Maintenance Electric Motor/Lab	0

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable

Content— Manufacturing Career Cluster	Rating
Maintaining Industrial Equipment	0
Industrial Safety	3
Pneumatic Systems/Lab	0
Technical Communications	0
Technical Math	4
SMAW Plate Labs	0
Gas Tungsten Arc Welding/Lab	0
Certification Welding/Lab	0
Oxy-fuel Cutting Lab	0
Wood Product Manufacturing	0
Wood Finishing	0

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable

Content— Manufacturing Career Cluster	Rating
Technical Drawing and Blueprint Reading	0
Millwork Technology	0
Furniture Technology	0
Basic Refrigeration and Air Conditioning	0
Electrical Components and Test Equipment	4
Gas/Electric Appliance Applications	0
Maintenance of Industrial Equipment	0
Polymer Science and Testing	0
Environmental Practices	1
Project Lead The Way (Pre-Engineering)	0
Comments:	Total 30

Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable

Instruction and Assessment	Rating
Identifies a Sense of Purpose	4
Builds on Student Ideals	2
Engages Students	3
Develops Computer Maintenance Ideas	0
Promotes Student Thinking	4
Assesses Student Progress	3
Enhances The Learning Environment	3
Reading level is appropriate for interest and ability level of intended student group; level remains consistent throughout.	3
Commonwealth Accountability Testing System (CATS) "like" Assessment is provided	4
Variety of Assessments (diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer performance, portfolio prompts) is included.	4
Includes activities and opportunities for integration of technology.	4
Reflects researched-based practices (e.g. hands-on activities, technology, problem-solving situations)	3
Differentiation techniques and activities suggested.	4
Comments:	Total 41

Rating Scale:	3 – Some potential for learning	1 - Not present
4 – High potential for learning	2 – Little potential for learning	0 – Not applicable

Organization and Structure	Rating
Organization is logical and allows for spiraling of content.	4
Vocabulary and key terms are clearly defined and easily accessible within each lesson.	4
Visual illustrations (e.g. graphs, charts, models) and examples are clearly presented and content-related.	4
Illustrations and language reflect diversity (e.g. racial, ethnic, cultural, age, gender, disabilities).	0
Legible type, length of lines, spacing, and page layout and width of margins contribute to overall appearance and use.	4
Student materials seem durable and conducive to daily use.	4
Includes sufficient glossary, index and appendices.	4
Employs accurate grammar and spelling	4
Organization of material can be effectively used with Standards Based Units, Core Content and Program of Studies.	3
Comments:	Total 31

Resource Materials	Rating
Teacher materials coordinate easily with student materials (e.g. additional resources included at point of need, student pages shown, integration of technology indicated)	4
Activities are included that adapt to the various learning styles, intelligences, and interest/ability levels.	4
Extension activities including adaptations and accommodations for students with special needs.	4
Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections with career and/technology and references (e.g. solution manuals, study guides)	4
Suggestions are made for integration of themes and /or interdisciplinary instruction.	3
Integration opportunities suggested and examples given.	4
Teacher resources are available online.	2
Online resources available – Repeat of information in text.	1
Online resources available – Practice skills only.	2
Online resources available – New application materials.	1
Comments: Online test only	Total 30
Rating Scale:	2—Minimally
4—All or the time	1—None of the time
3—Some of the time	0— Not applicable